SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT EASTERN KAZAKH SSR, 15 JANUARY 1976

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Eastern Kazakh SSR, 15 January 1976

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SDCS EVENT REPORT NO. 82

Eastern Kazakh SSR, 15 January 1976

A

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	m_b	M_s
NORSAR	04:54:18.6	04:46:47	49 N	080 E	5.0	N/A
Hagfors	04:54:09.0	04:46:00 ?	50 N	078 E	5.5	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

04:47:05.9	50.9N	077.9E	5.1	N/A

All SDCS stations were operational during this period.

The programs used for LASA, NORSAR and ALPA data recovery are presently undergoing modifications. Information for LASA short-period is reported from their Teleseism Event Report; NORSAR short-period data is obtained from their bulletin. The long-period array beam recovery for these stations will be resumed upon completion of these modifications.

Short-period signals associated with this event were recorded at WH2YK, RK-ON, LASA and NORSAR. All SP channels at HN-ME had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal SP channels at all SDCS stations were rotated.

Long-period signal arrivals at all SDCS stations were masked by Kermadec Islands event. All LP channels at HN-ME and the LP radial channel at RK-ON had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal channels at all SDCS stations were rotated.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response).

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SECS	ELEVATION METERS	INSTRUMENTATION SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65 14 00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35 41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41 19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09 43.0 N 067 59 09.0 W	213	KS36000	KS36000
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41 41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 16° ± 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 15 JAN 76
04:47:00.0 50.000N 80.000E 0KM.

STA.	ARRIVAL	RESIDUALS CALC	RESIDUALS REST	DIST. REST	AZ. REST
NAO	04 54 18.6	-8.3	0.1	37.3	311.9
WH2YK	04 57 50.6	-4.0	0.2	65.7	17.1
RK-ON	04 59 06.4	-5.3	-0.6	78.4	354.6
LAO	04 59 30.8	-3.4	0.4	82.7	2.9

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
NO CONVERGENCE ON CALC RUN						
04:46:24.1	49.500N	78.373E	-215. CALC	2.2	16	4
04:47:05.9	50.902N	77.930E	0. REST	0.4	4	4

CALC

```
    1 . 2
  1   .   0
0    0. 0   0
. . . . . . .
0    0. 0   0
  0   .   0
    0 . 0
```

REST

```
    1 . 2
  1   .   0
0    0. 0   0
. . . . . . .
0    0. 0   0
  0   .   0
    0 . 0
```

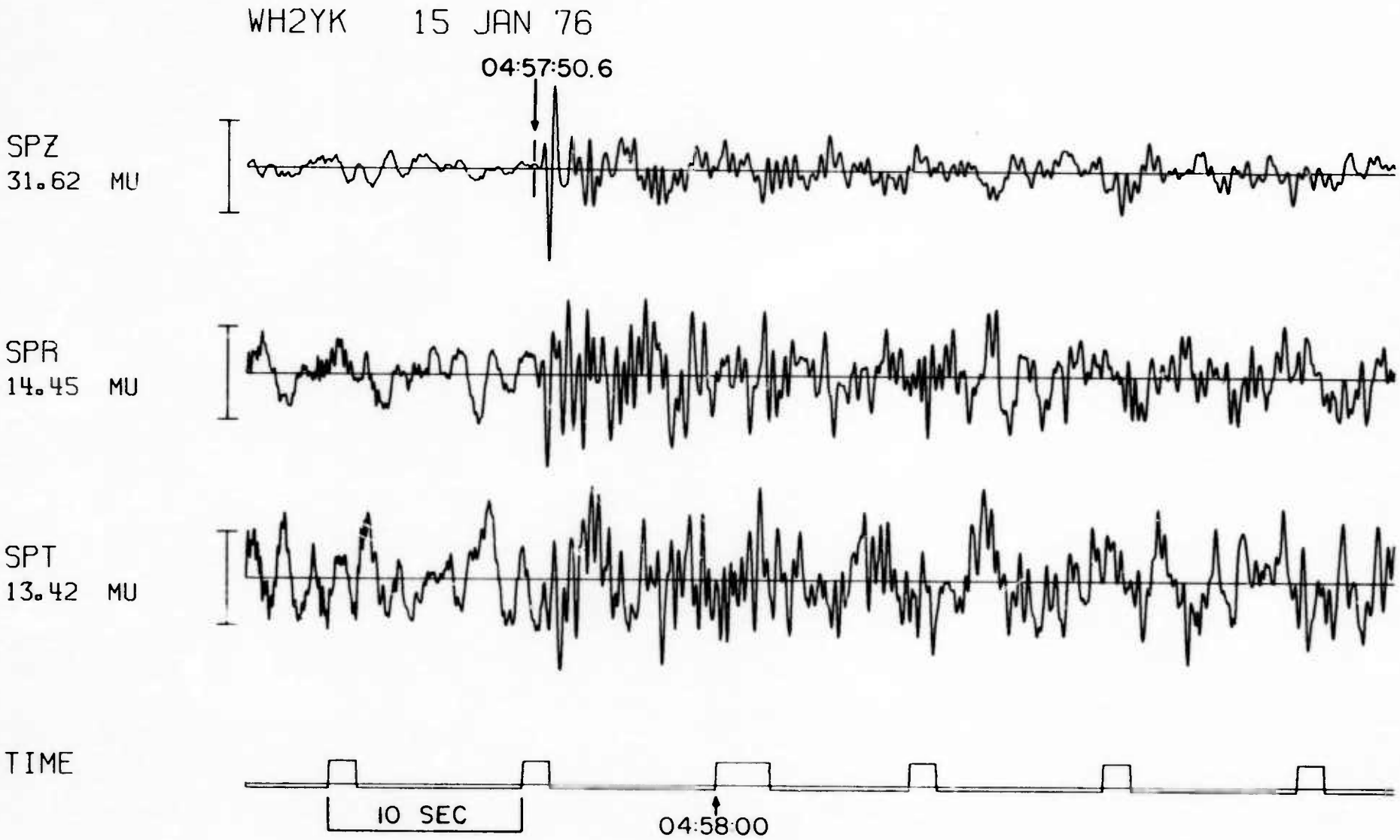
CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 0.99
MAJOR 370.7KM. MINOR 43.4KM. AZ= 179 AREA= 50598 SQ.KM. REST

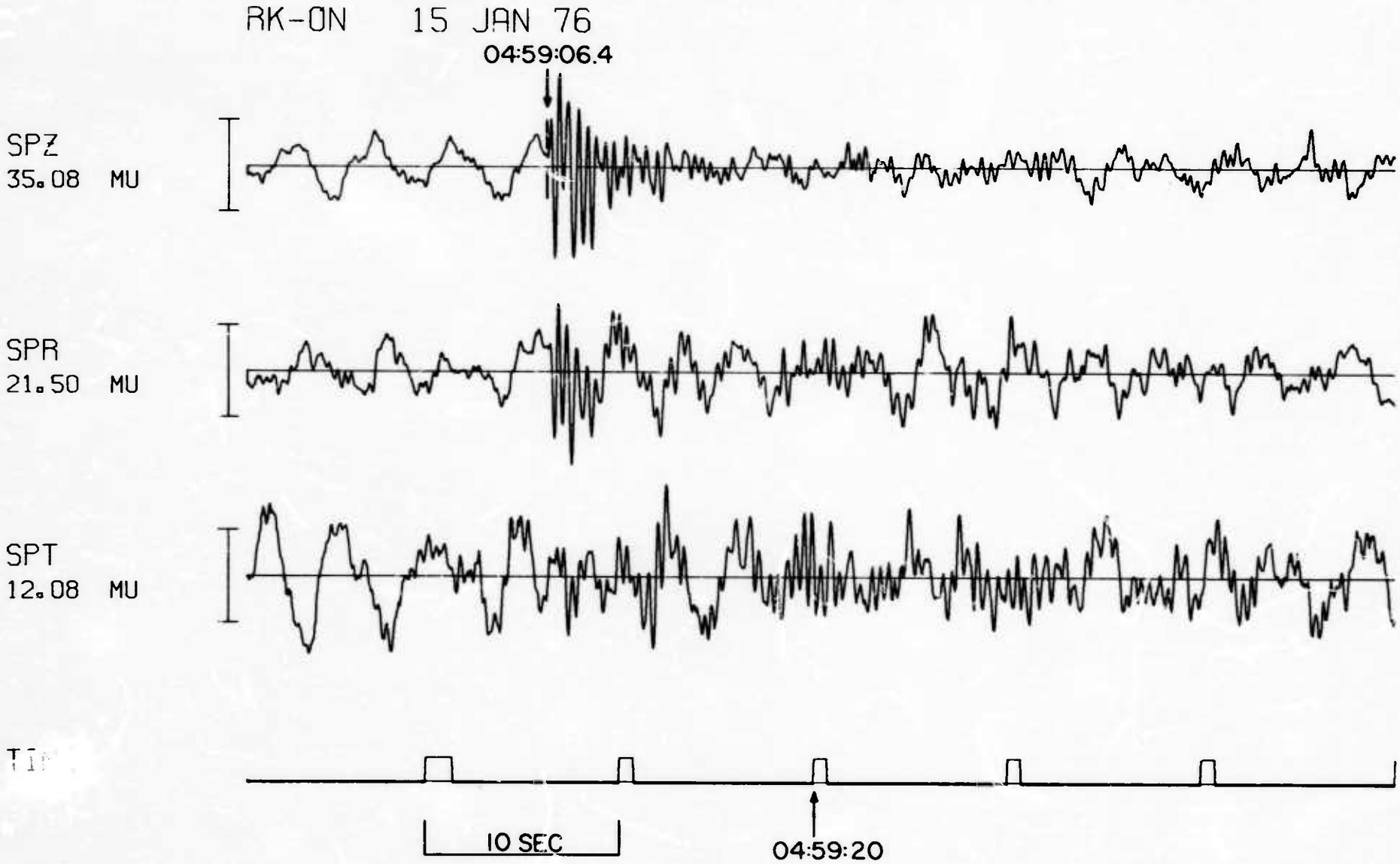
DATA SUMMARY

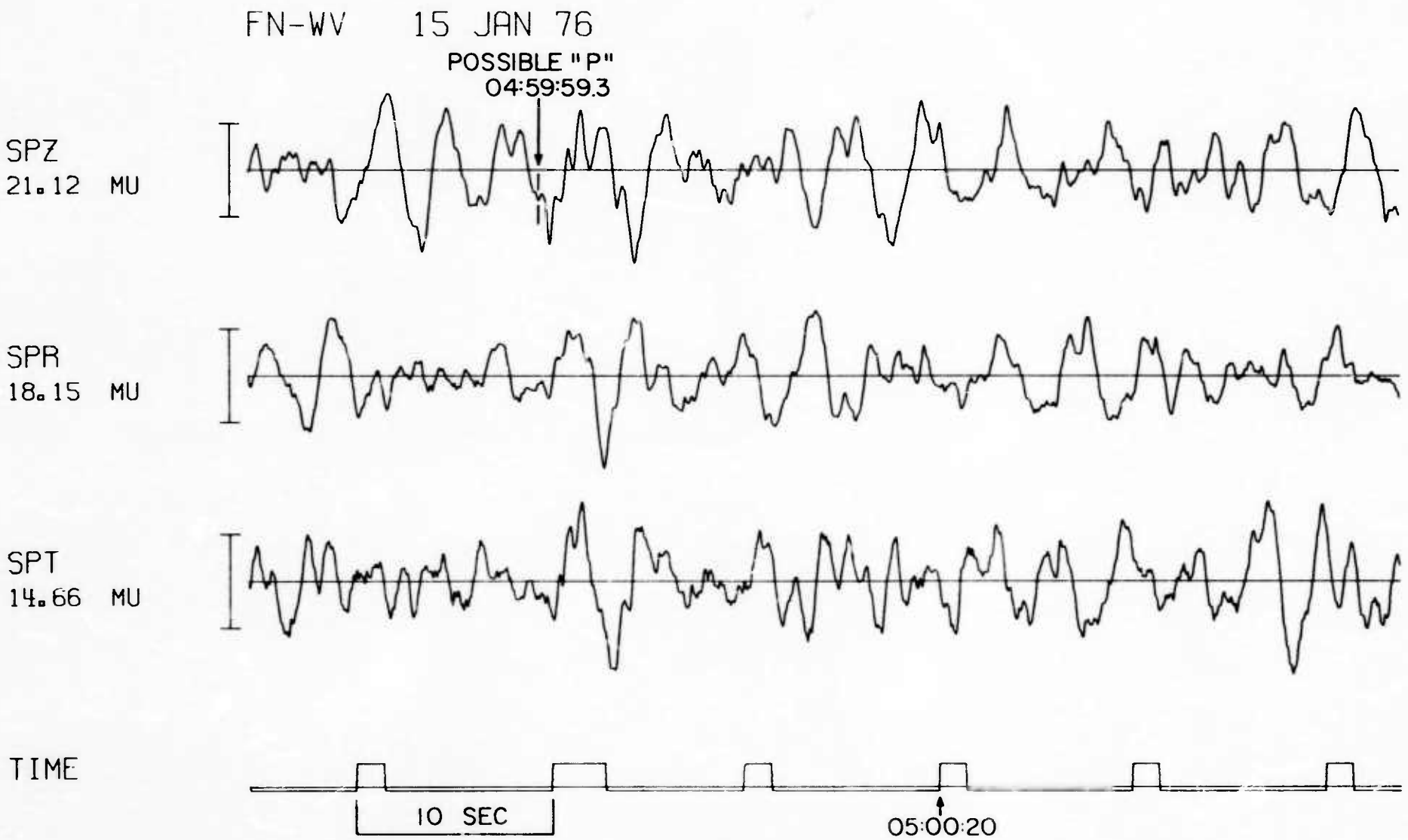
INPUT FOR EVENT 15 JAN 76
04:47:00.0 50.000N 80.000E 0KM.

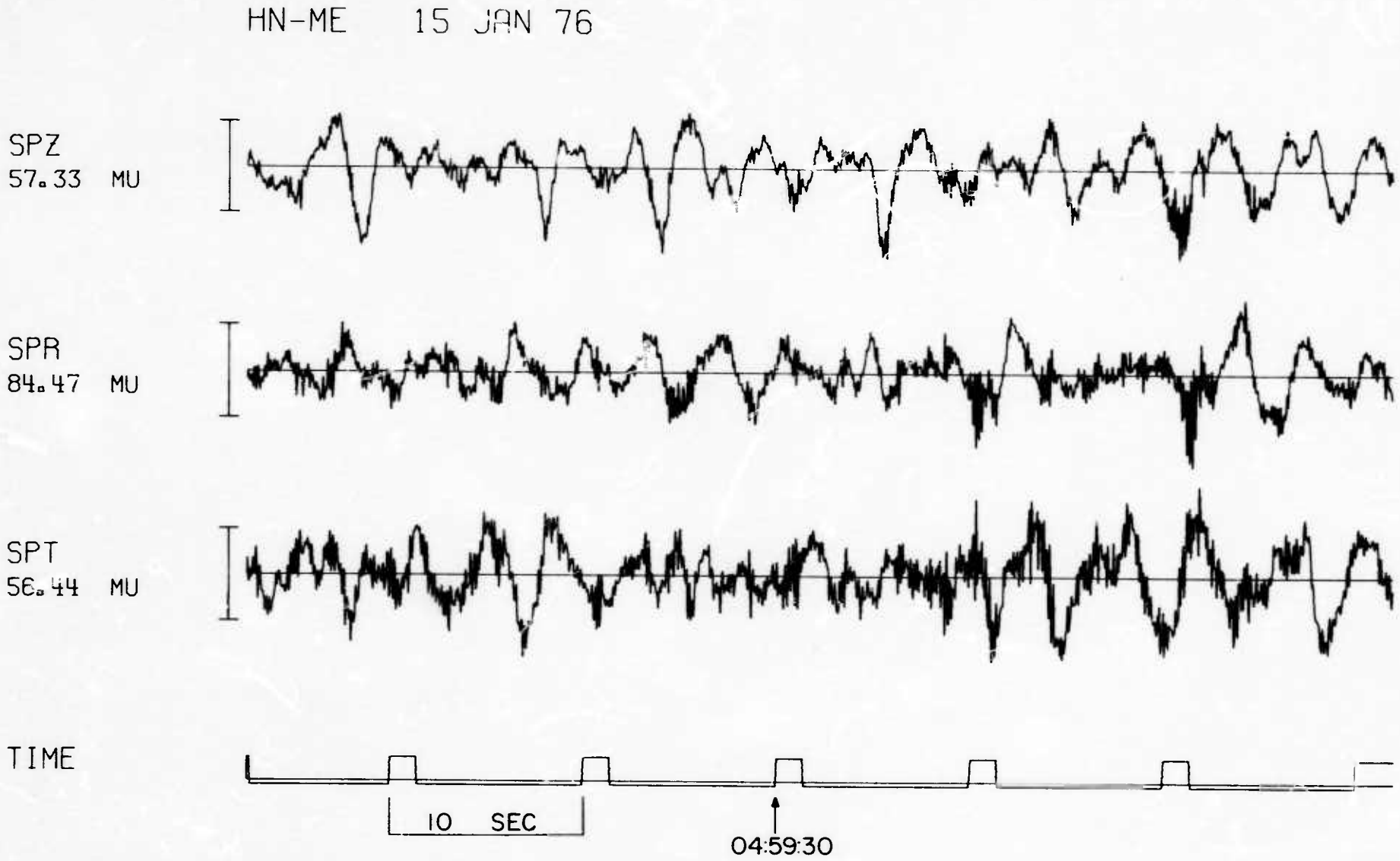
STA.	PHASE	ARRIVAL TIME	INST	PER	A/T	MAGNITUDE MB	MS	DIR	DIST
NAO	EP	04 54 18.6	AB	0.5	49.	4.89			37.3
WH2YK	EP	04 57 50.6	SPZ	0.5	34.	5.23			65.7
RK-ON	EP	04 59 06.4	SPZ	0.4	43.	5.19			78.4
LAO	EP	04 59 30.8	SAB	0.0	0.				

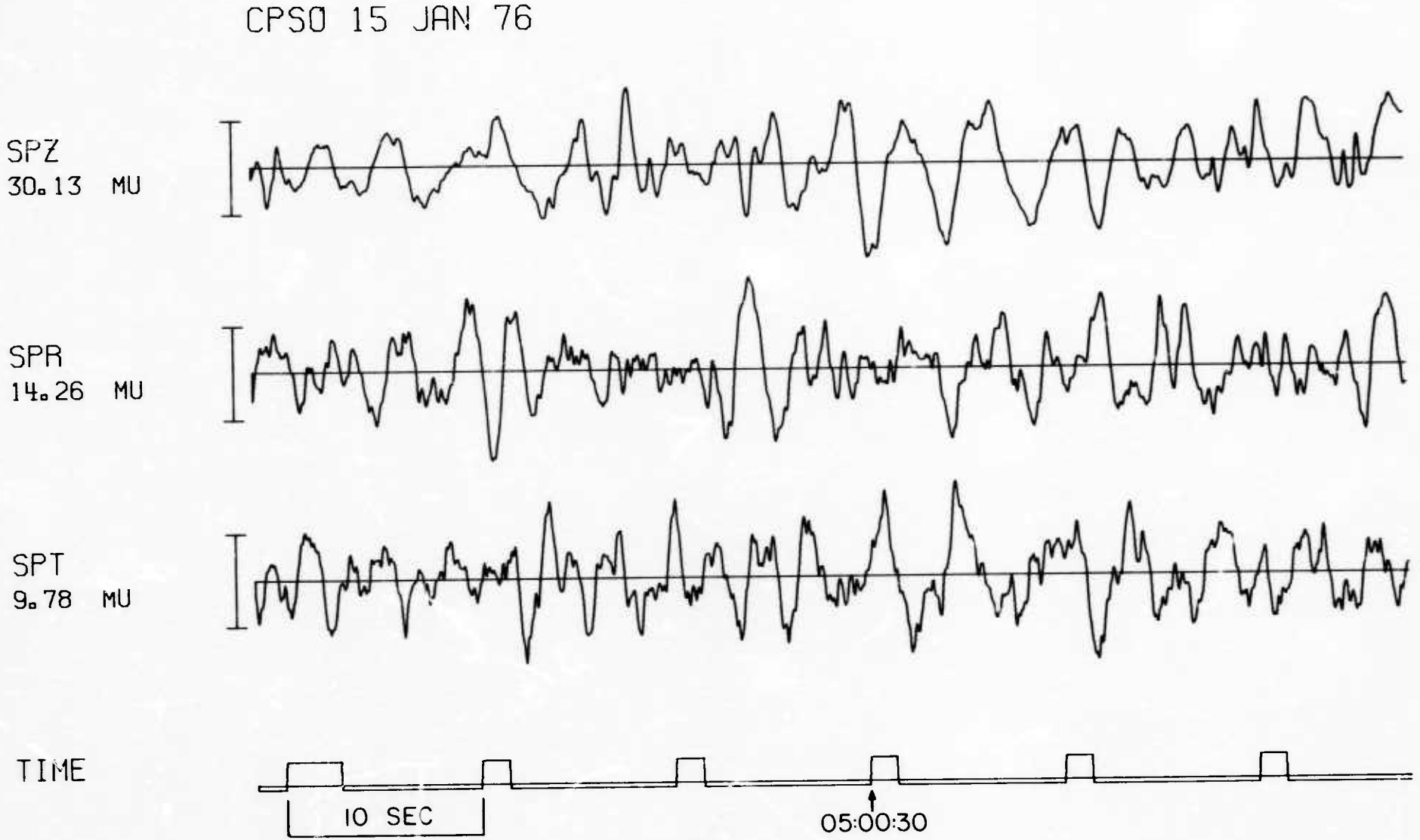
ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA
04:47:05.9	50.902N	77.930E	0. REST	5.11	0.19	3

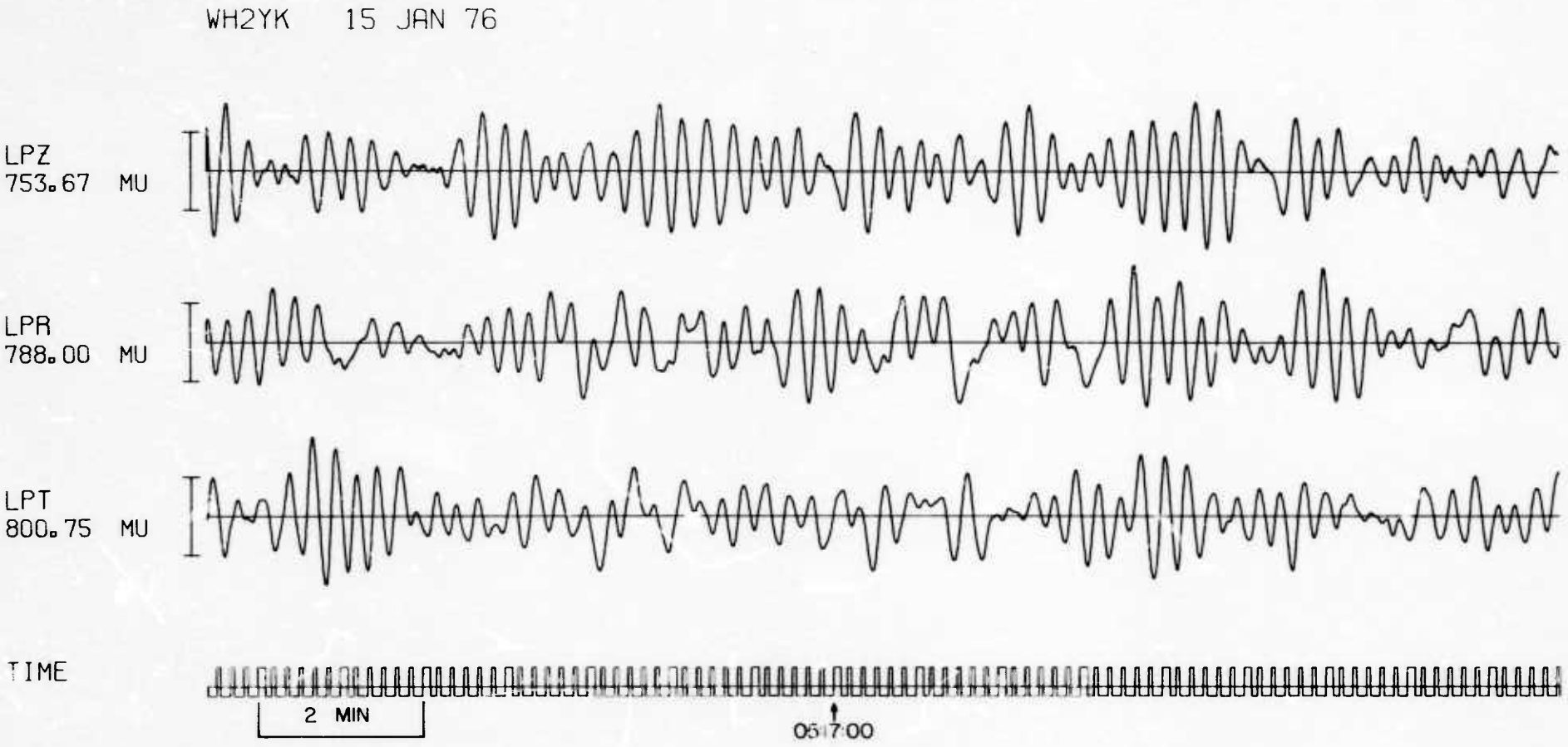

WH2YK 15 JAN 76
04:57:50.6
SPZ
31.62 MU
SPR
14.45 MU
SPT
13.42 MU
TIME
10 SEC
04:58:00

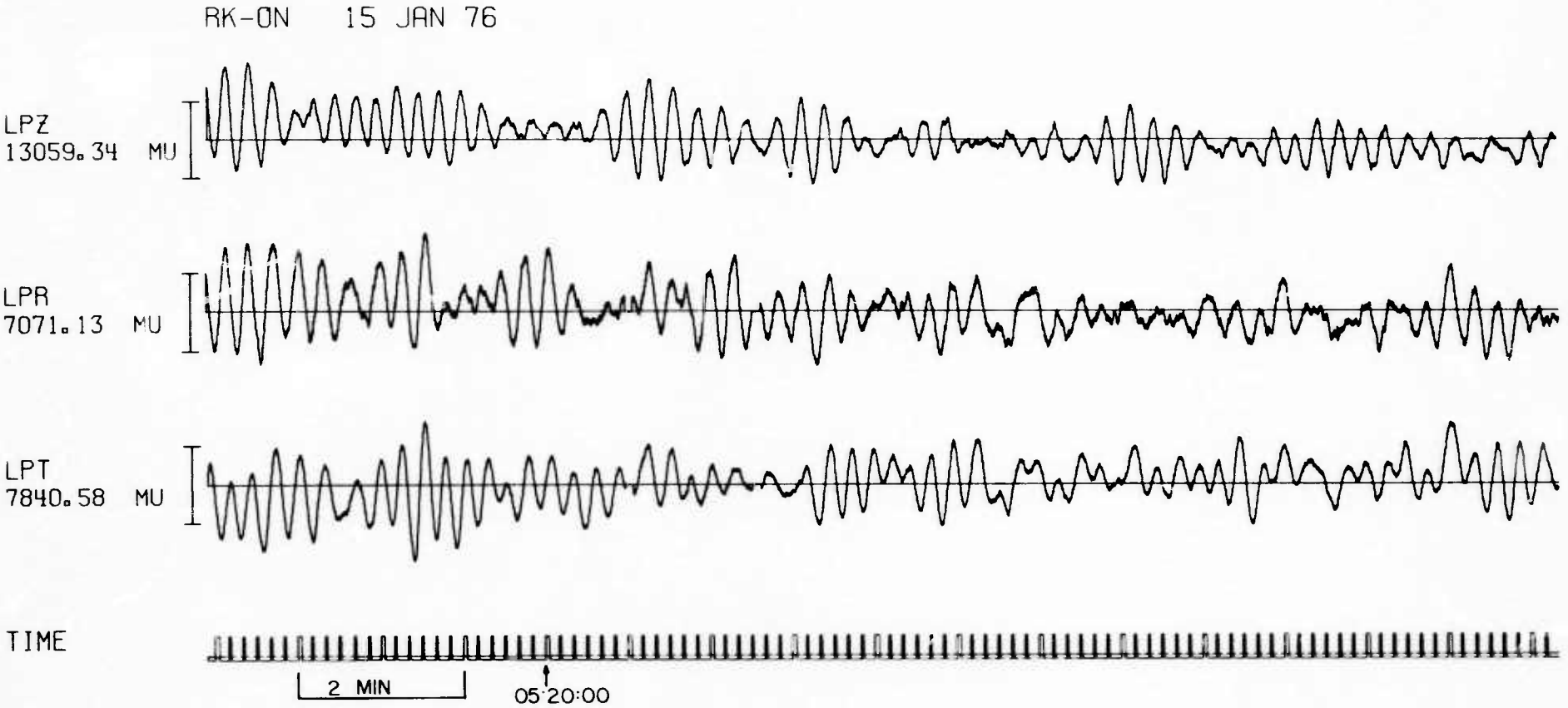

RK-ON 15 JAN 76
04:59:06.4
SPZ
35.08 MU
SPR
21.50 MU
SPT
12.08 MU
10 SEC
04:59:20

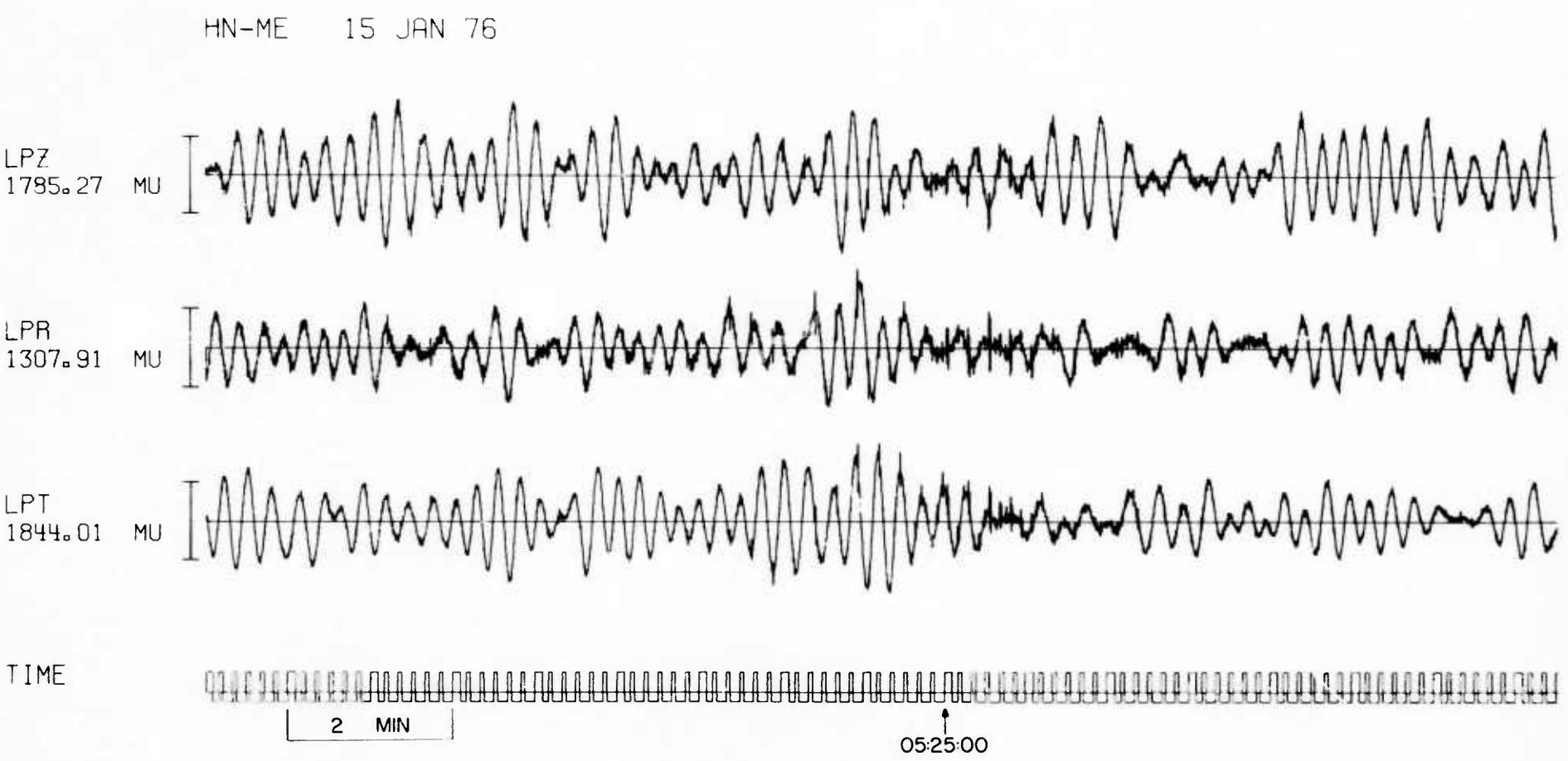

FN-WV 15 JAN 76
POSSIBLE "P"
04:59:59.3
SPZ
21.12 MU
SPR
18.15 MU
SPT
14.66 MU
TIME
10 SEC
05:00:20

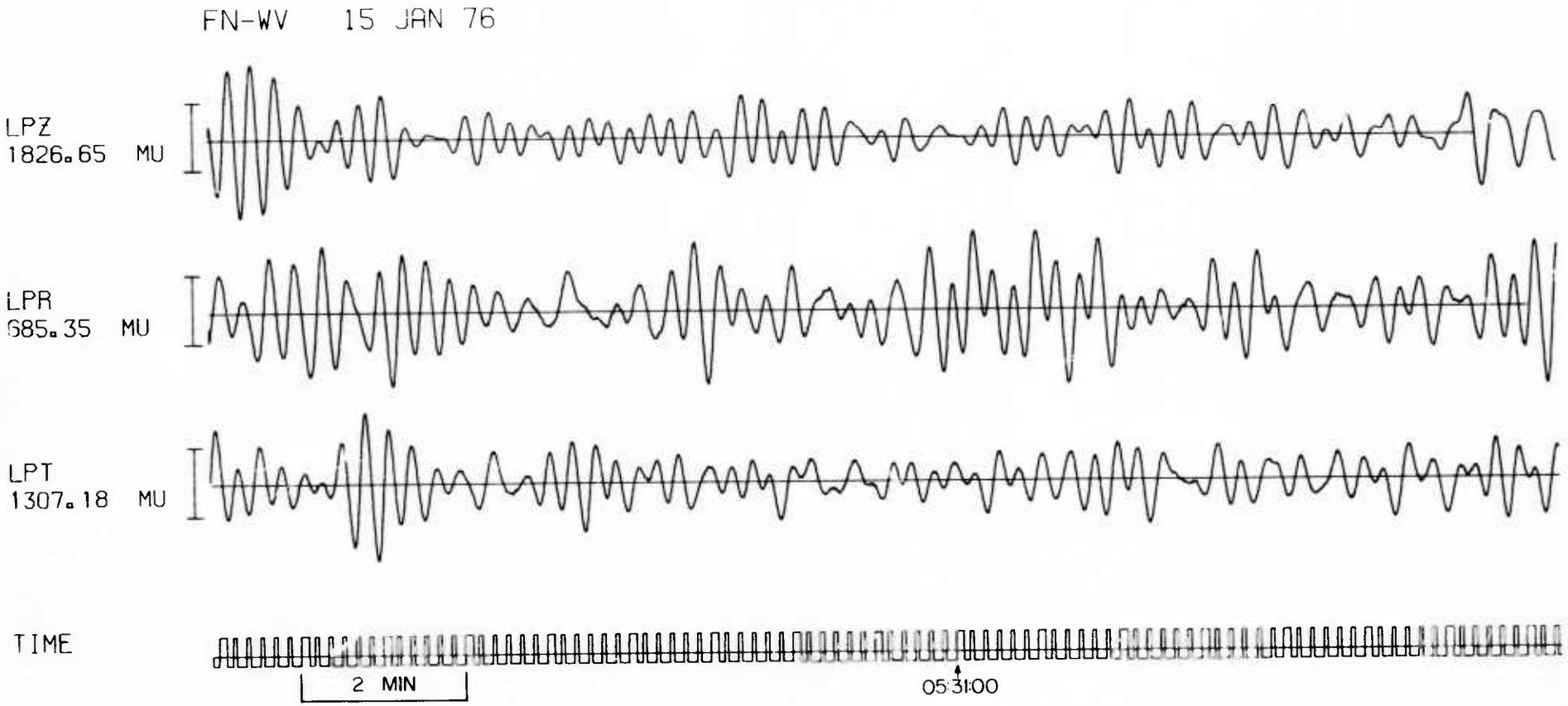

HN-ME 15 JAN 76
SPZ
57.33 MU
SPR
84.47 MU
SPT
56.44 MU
TIME
10 SEC
04:59:30

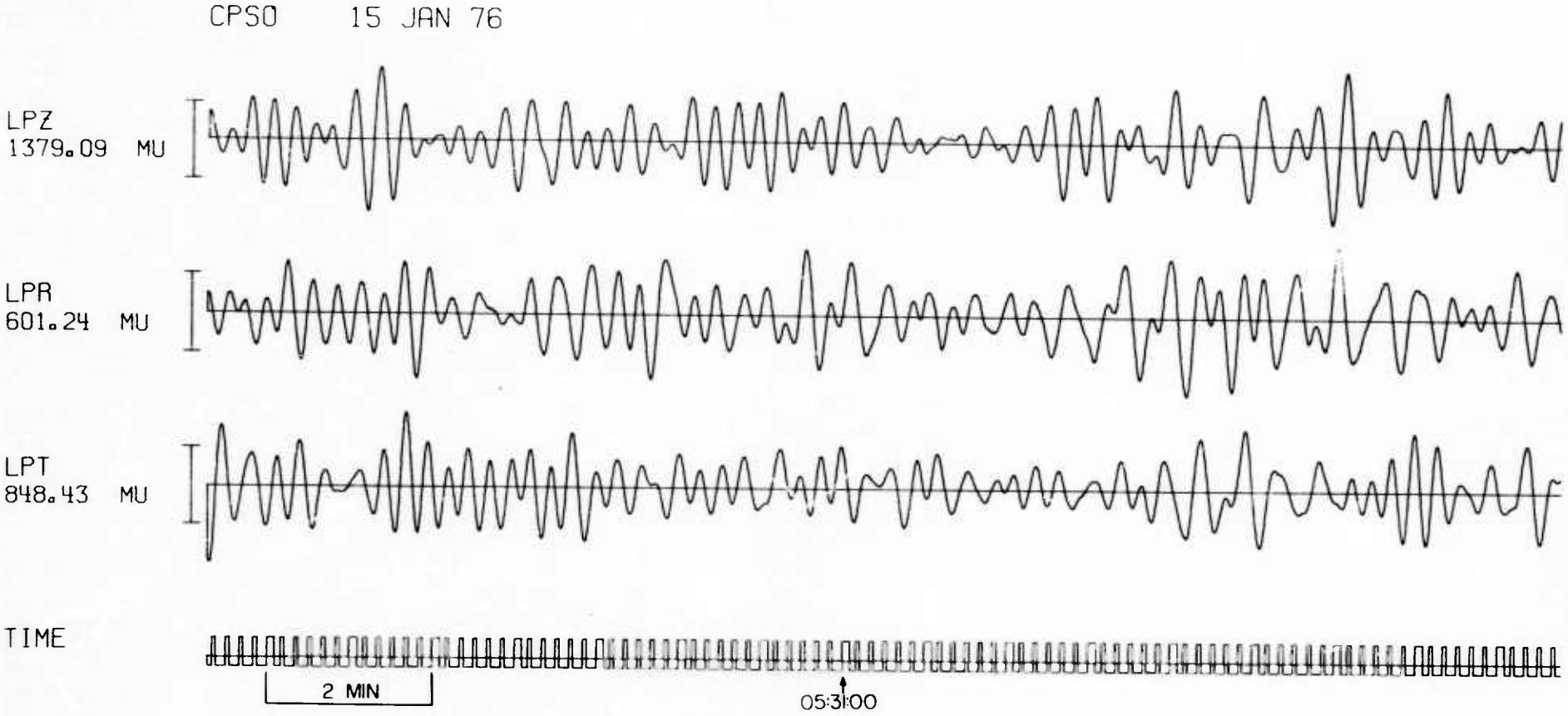

CPSO 15 JAN 76
SPZ
30.13 MU
SPR
14.26 MU
SPT
9.78 MU
TIME
10 SEC
05:00:30


WH2YK 15 JAN 76
LPZ
753.67 MU
LPR
788.00 MU
LPT
800.75 MU
TIME
2 MIN
05:17:00


RK-ON 15 JAN 76
LPZ
13059.34 MU
LPR
7071.13 MU
LPT
7840.58 MU
TIME
2 MIN
05:20:00


HN-ME 15 JAN 76
LPZ
1785.27 MU
LPR
1307.91 MU
LPT
1844.01 MU
TIME
2 MIN
05:25:00


FN-WV 15 JAN 76
LPZ
1826.65 MU
LPR
685.35 MU
LPT
1307.18 MU
TIME
2 MIN
05:31:00


CPSO 15 JAN 76
LPZ
1379.09 MU
LPR
601.24 MU
LPT
848.43 MU
TIME
2 MIN
05:31:00